



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,702	01/12/2004	Michael Krebs	HENK-0154/H5344	3428
38857	7590	09/25/2006	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE, 46TH FLOOR PHILADELPHIA, PA 19103			NILAND, PATRICK DENNIS	
			ART UNIT	PAPER NUMBER
			1714	
DATE MAILED: 09/25/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.



Art Unit: 1714

1. The amendment of 6/22/06 has been entered. Claims 1-21 and 23-24 are pending.

2. Claims 19-20 and 23-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. It is unclear if the additional step of claims 19-20 and 23-24 are required to maintain the NCO:OH ratio of claim 1 or if these additional steps are reacting polyol in excess of that encompassed by the claimed NCO:OH ratio. It is not seen that this rejection has been addressed.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-21 and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 00/05290 Bolte et al., translation supplied by applicant referenced.

Bolte discloses a polyurethane prepolymer made by the instantly claimed processes at page 5, lines 3-7 which falls within the scope of the instant claims 3 and 12 by one interpretation of claim 12; page 6, lines 10-30; page 7, lines 5-9 which is expected to give the parameter of the instant claim 2 inherently based on the definition of viscosity average molecular weight and the fact that the other requirements of claim 2 are met and lines 10-30; page 8, lines 1-30,

Art Unit: 1714

particularly 21-25; page 9, lines 13-15; page 10, lines 9-30; page 11, lines 1-30; page 12, lines 1-30; page 13, lines 1-30; and page 14, lines 1-19 which encompasses the diols of the instant claims 1, 4, 10, 14, 15-17, 19-20, and 23-24 (note that the mixtures encompass the “additional” polyols of claims 19-20 and 23-24) and lines 20-30; page 15, line 7, which discloses the instantly claimed diisocyanate with sufficient specificity so as to anticipate its use; page 19, lines 22-27; page 20, lines 12-15 which falls within the scope of the NCO:OH ratios of the instant claims 1, 8, and 18, lines 17-30 which falls within the scope of the instant claim 11; page 21, lines 1-30 particularly 7-26 which falls within the scope of the instant claims 5-7, 9, and 21; page 25, lines 4-30; page 26, lines 1-12 and 21-26, which falls within the scope of the instant claim 26. The above discussed parameters are the same as claim 1 and therefore must give the limitation of claim 13 inherently. The claims do not exclude additional components of the reference.

Applicant's argument regarding free NCO groups is noted but the reference teaches the preparation of prepolymers having NCO groups throughout the disclosure of Bolte, e.g. page 6, lines 17-21, page 7, lines 5, 10-16 and 23-30 with particular emphasis on lines 27-30; page 8, lines 1-2, particularly lines 21-25 noting “at least equimolar” as it is understood that an excess is required to give NCO terminal groups but too much excess will give too much free monomer, which Bolte clearly doesn't desire and the stoichiometry required of the paragraph bridging pages 7-8 indicates clearly that no or little free monomeric isocyanate should remain. It is noted that the instant claims recite no closed language and therefore include the additional steps of the reference. It is also noted that the claims of the 112 above, e.g. 19-20 and 23-24 appear to encompass further reacting the isocyanate terminated component with further active H groups which is the additional reaction step of Bolte. In any event, the intermediate product of Bolte

Art Unit: 1714

which is the reaction product of polyisocyanates of the instant claims, polyol, the instantly claimed NCO:OH ratio and which has free NCO groups, i.e. prepolymer, falls within the scope of the instant claims as does the further reaction of this intermediate with further polyol. The remainder of the reference cited above further clarifies these points. The applicant's arguments are not commensurate in scope with the instant claims and the proper reading of the disclosure of Bolte. This rejection is therefore maintained.

6. Claims 1-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/05290 Bolte et al., translation supplied by applicant referenced in view of US Pat. No. 5721311 Oien.

Bolte discloses a polyurethane prepolymer made by the instantly claimed processes at page 5, lines 3-7 which falls within the scope of the instant claims 3 and 12 by one interpretation of claim 12; page 6, lines 10-30; page 7, lines 5-9 which is expected to give the parameter of the instant claim 2 inherently based on the definition of viscosity average molecular weight and the fact that the other requirements of claim 2 are met and lines 10-30; page 8, lines 1-30, particularly 21-25; page 9, lines 13-15; page 10, lines 9-30; page 11, lines 1-30; page 12, lines 1-30; page 13, lines 1-30; and page 14, lines 1-19 which encompasses the diols of the instant claims 1, 4, 10, 14, 15-17, 19-20, and 23-24 (note that the mixtures encompass the "additional" polyols of claims 19-20 and 23-24) and lines 20-30; page 15, line 7, which discloses the instantly claimed diisocyanate with sufficient specificity so as to anticipate its use; page 19, lines 22-27; page 20, lines 12-15 which falls within the scope of the NCO:OH ratios of the instant claims 1, 8, and 18, lines 17-30 which falls within the scope of the instant claim 11; page 21, lines 1-30 particularly 7-26 which falls within the scope of the instant claims 5-7, 9, and 21; page 25, lines

Art Unit: 1714

4-30; page 26, lines 1-12 and 21-26, which falls within the scope of the instant claim 26. The above discussed parameters are the same as claim 1 and therefore must give the limitation of claim 13 inherently. The claims do not exclude additional components of the reference.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed methods and ingredient combinations to make the prepolymer and compositions of the instant claims because they are encompassed by the reference and would have been expected to give the properties disclosed by Bolte.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed aliphatic tertiary amine in the composition of Bolte because Bolte states that their compositions are useful as moisture curing compositions at page 26, lines 21-26 and the instantly claimed amines are well known for catalyzing/accelerating this moisture curing as taught by Oien, column 7, lines 28-32 and column 10, lines 36-54 and this catalyzation/acceleration of the moisture cure would have been expected in Bolte.

This rejection is maintained for the reasons stated in paragraph 5 above and for the reasons cited herein.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 1714

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Cam Jagannathan for*  
Patrick D. Niland  
Primary Examiner  
Art Unit 1714  
*Patrick Niland*